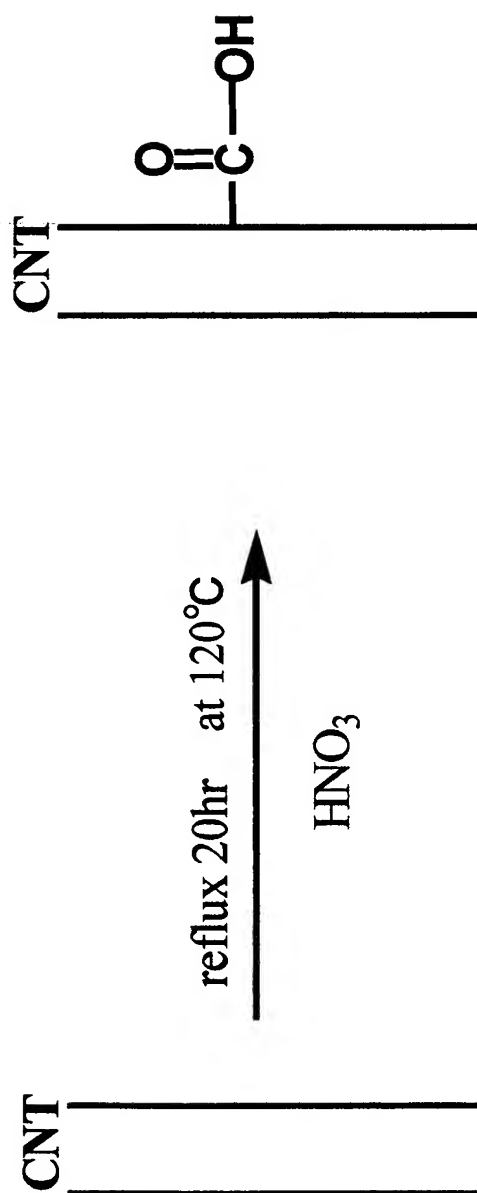
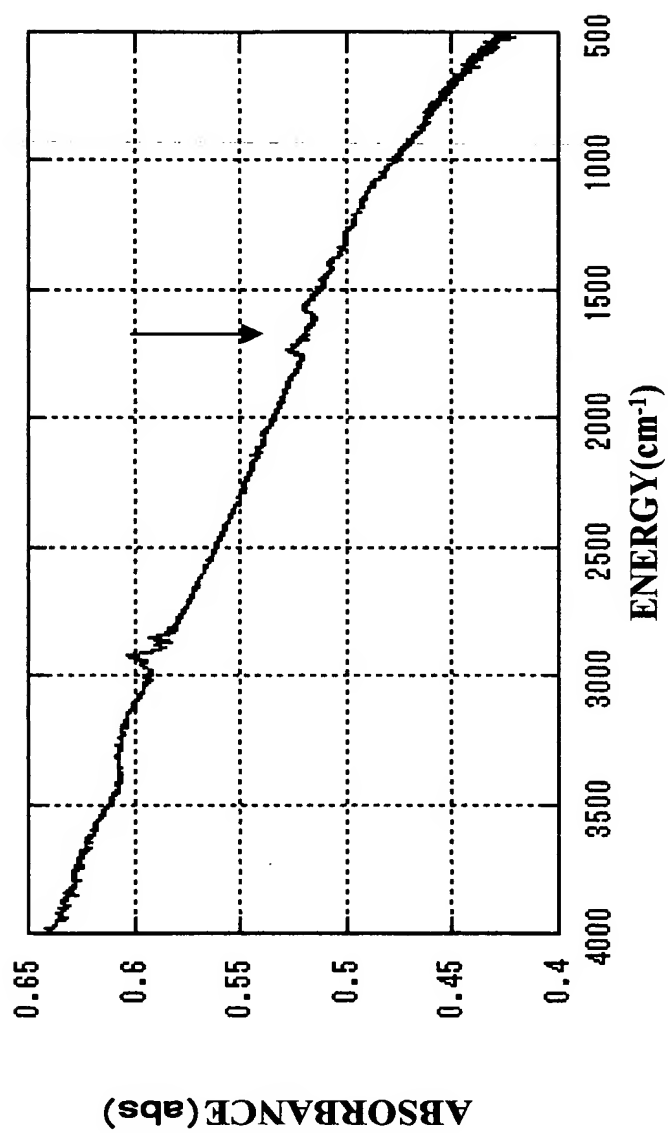


10/537745



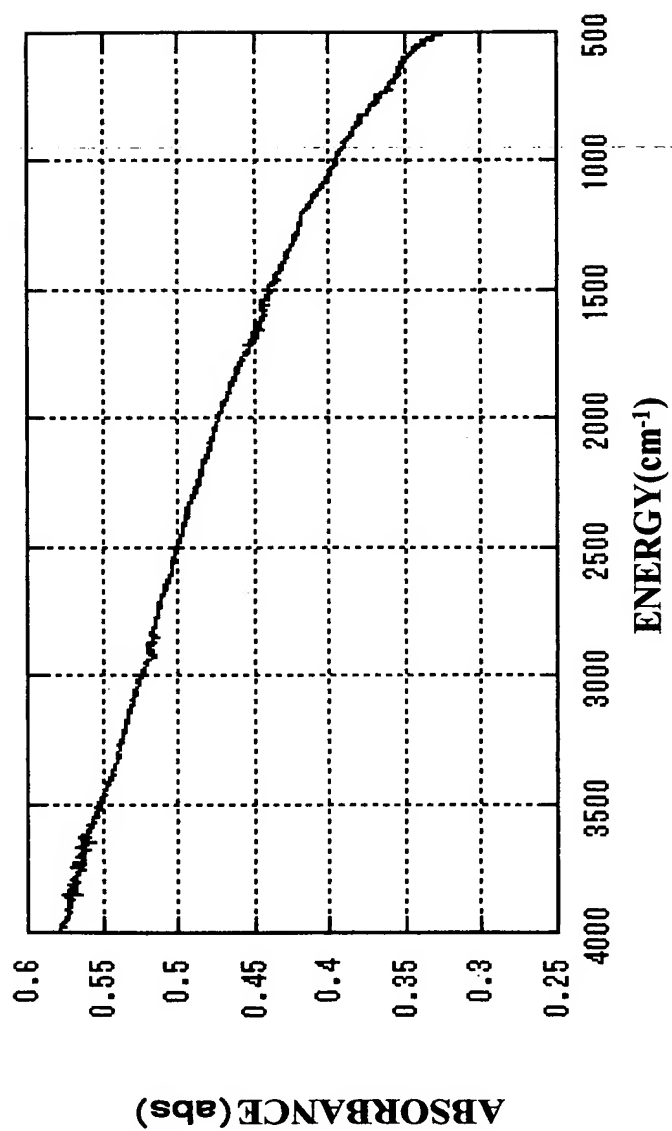
REACTION SCHEME FOR INTRODUCING CARBOXYL GROUP INTO CARBON NANOTUBE

Fig. 1



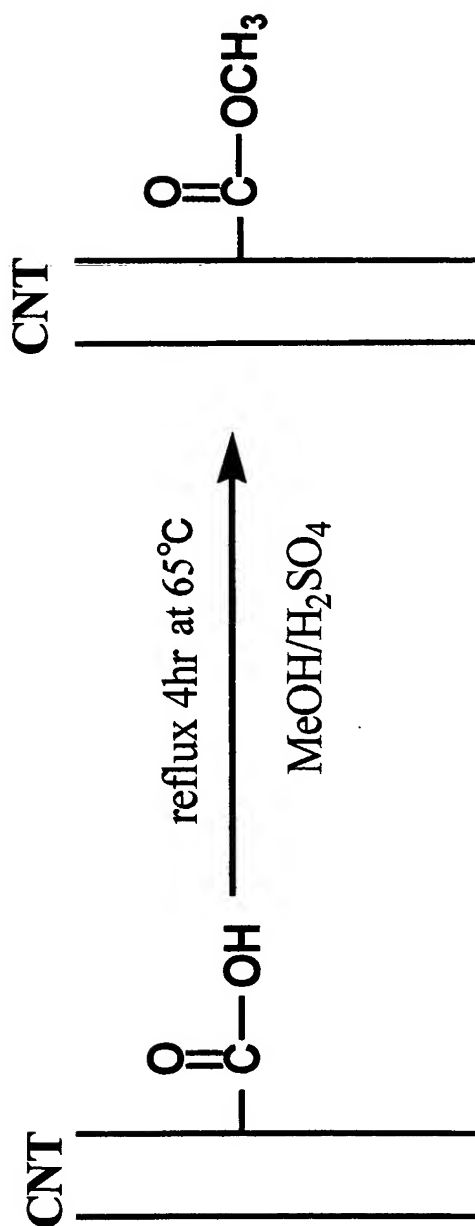
INFRARED ABSORPTION SPECTRUM OF MULTI-WALL CARBON
NANOTUBE CARBOXYLIC ACID

Fig. 2



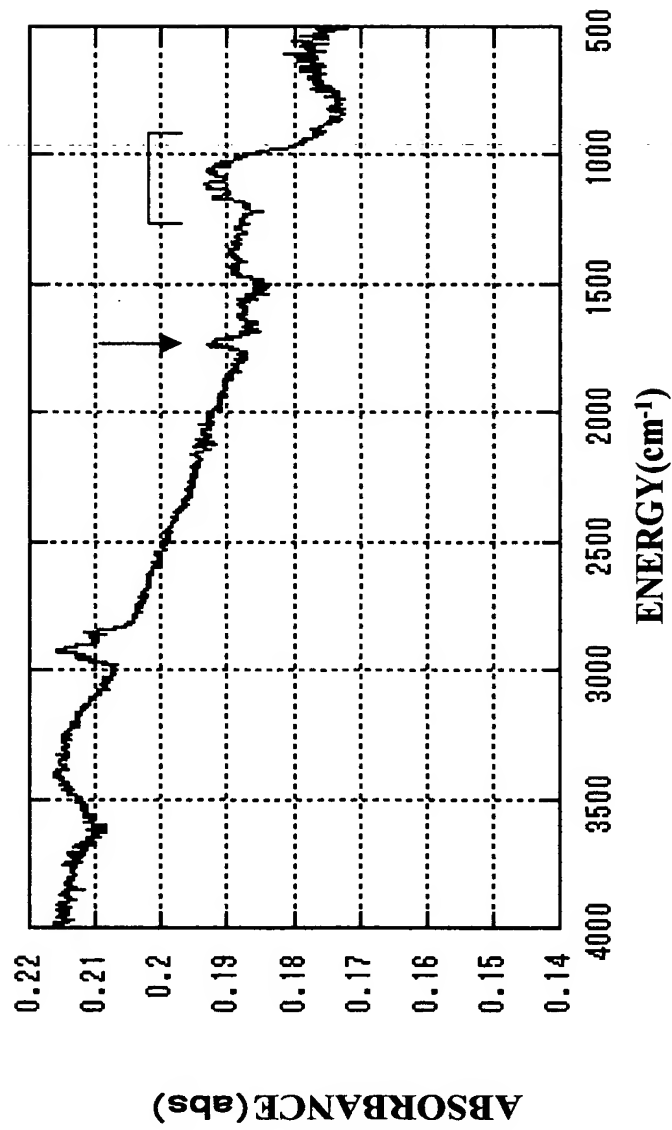
INFRARED ABSORPTION SPECTRUM OF MULTI-WALL CARBON
NANOTUBE RAW MATERIAL

Fig. 3



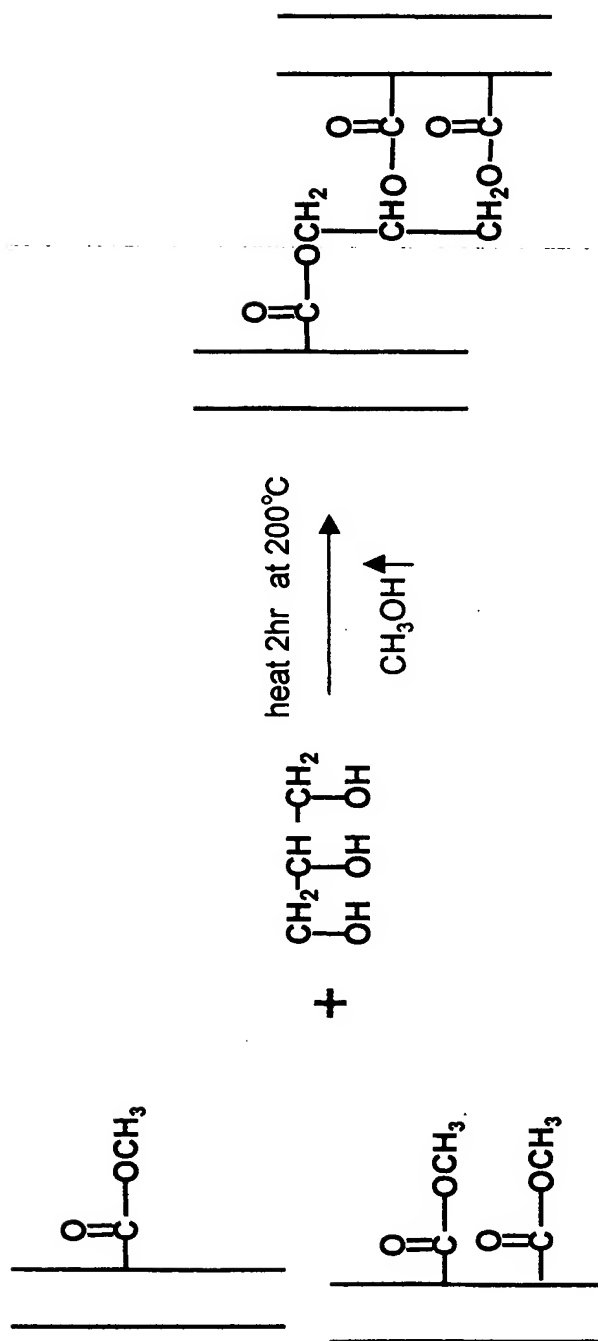
SCHEME FOR METHYL ESTERIFICATION REACTION OF CARBON NANOTUBE CARBOXYLIC ACID

Fig. 4



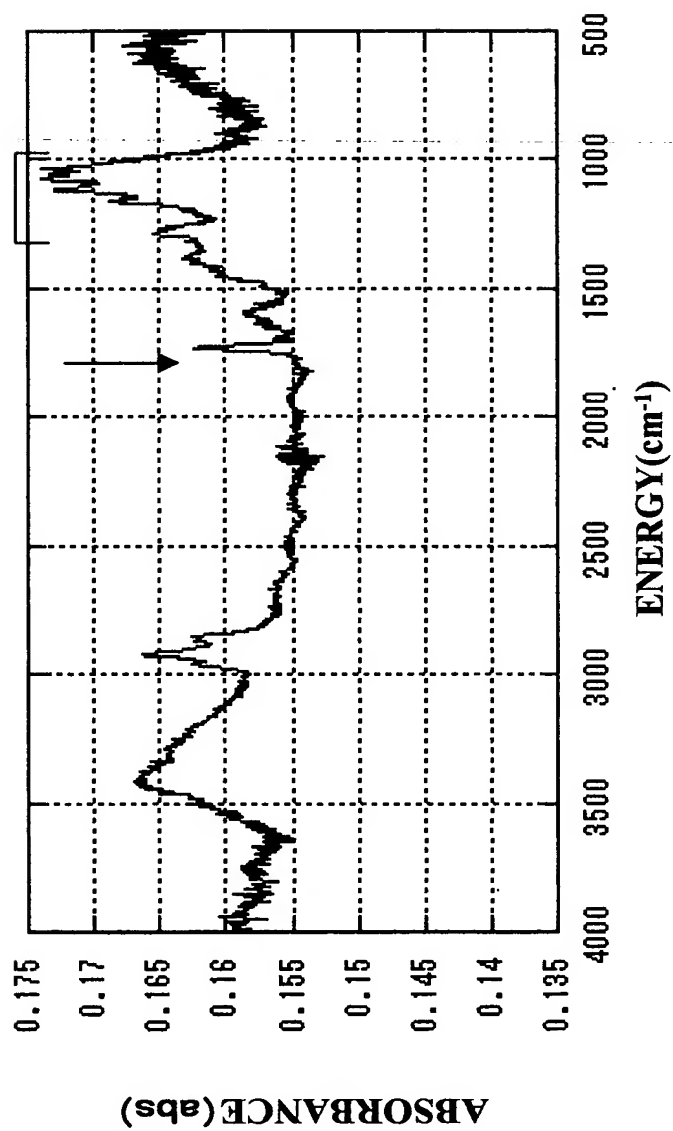
INFRARED ABSORPTION SPECTRUM OF MULTI-WALL CARBON NANOTUBE
CARBOXYLIC ACID METHYL ESTER

Fig. 5



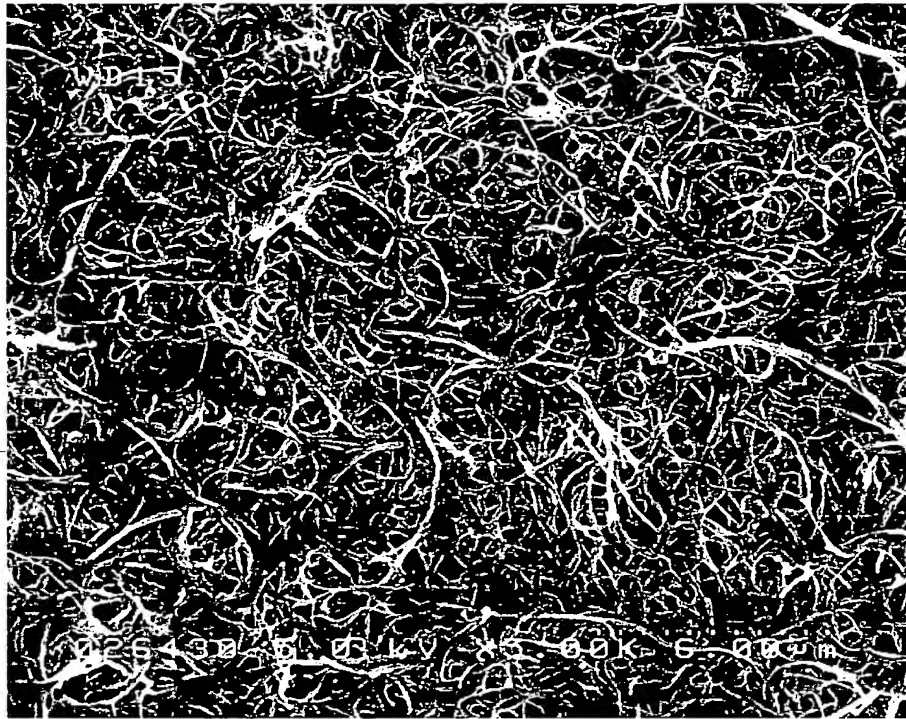
SCHEME FOR POLYMERIZATION REACTION BETWEEN CARBON NANOTUBE
CARBOXYLIC ACID METHYL ESTER AND GLYCERIN BY ESTER EXCHANGE

Fig. 6



INFRARED ABSORPTION SPECTRUM OF ESTER OF MULTI-WALL CARBON NANOTUBE
CARBOXYLIC ACID AND GLYCERIN

Fig. 7



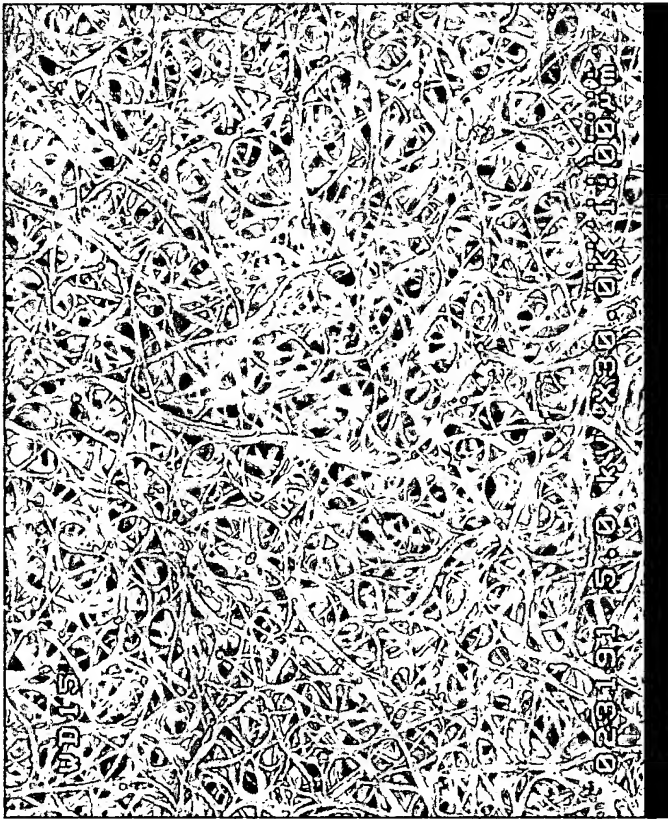
× 5000

Fig. 8(a)



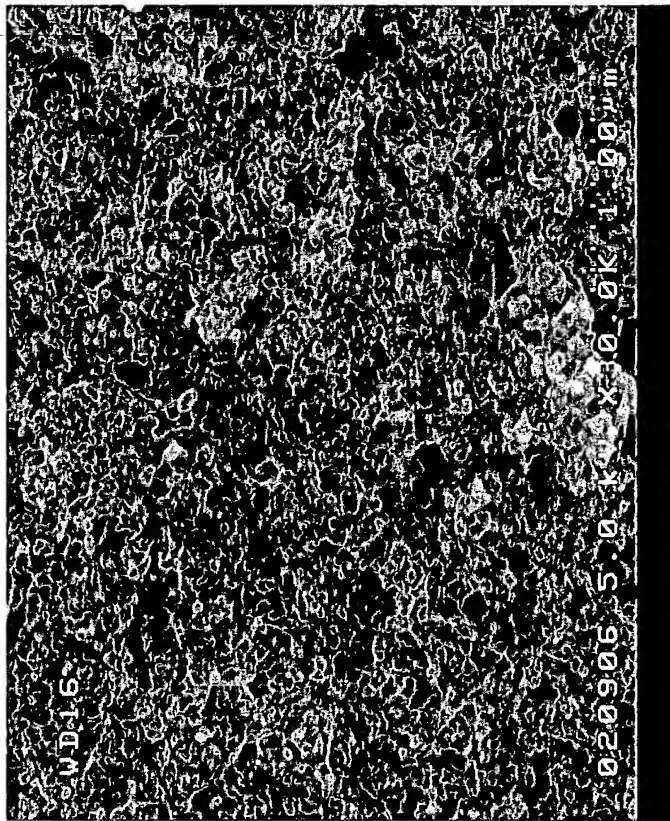
× 20000

Fig. 8(b)



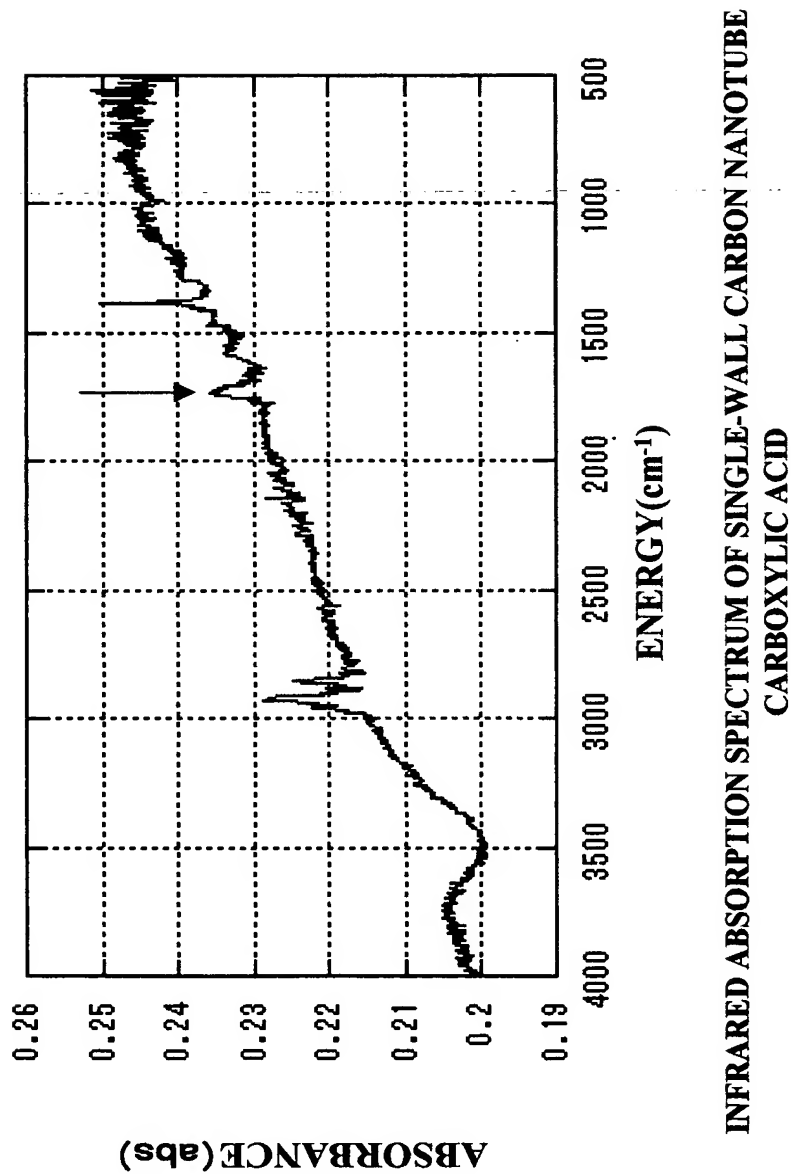
ELECTRON MICROSCOPE PHOTOGRAPH OF PURIFIED
SINGLE-WALL CARBON NANOTUBE
(AT MAGNIFICATION OF 30,000)

Fig. 9



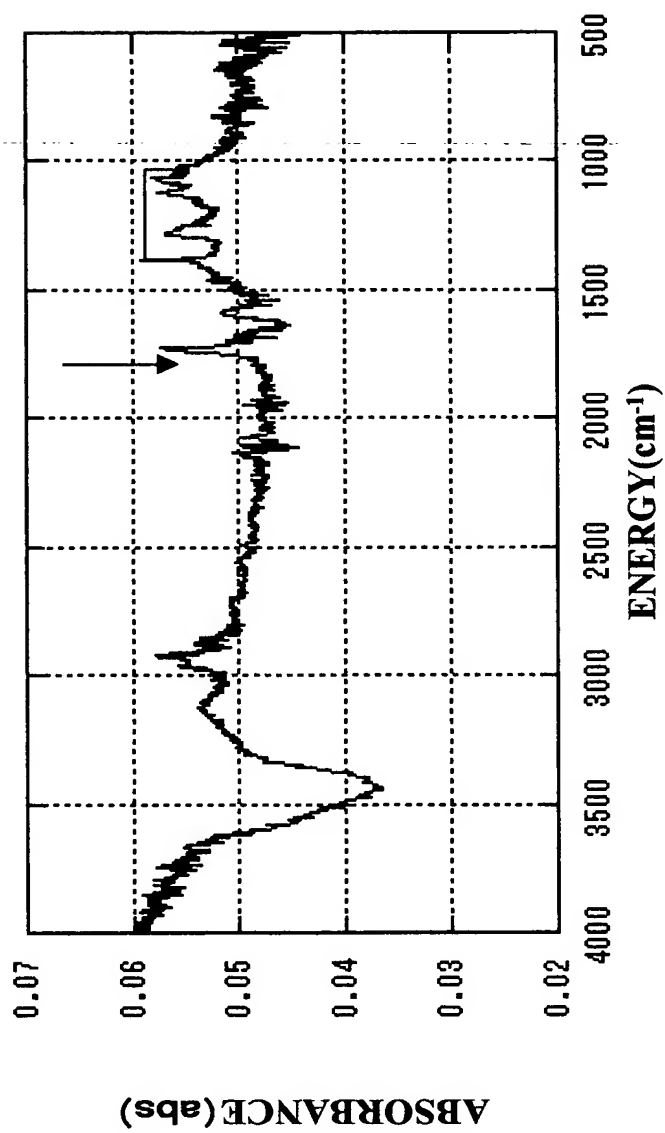
ELECTRON MICROSCOPE PHOTOGRAPH OF SINGLE-
WALL CARBON NANOTUBE AS RAW MATERIAL
(AT MAGNIFICATION OF 30,000)

Fig. 10



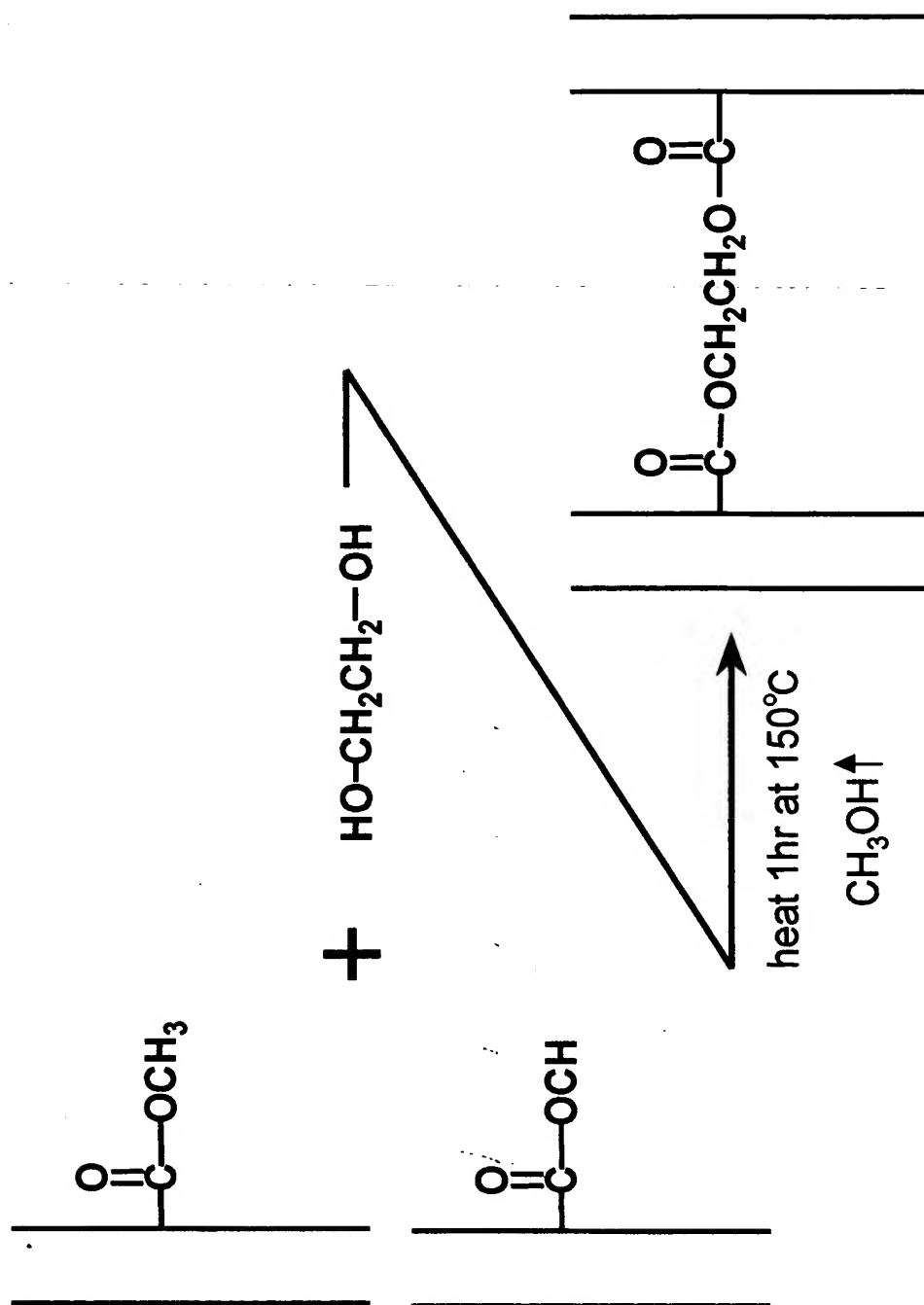
INFRARED ABSORPTION SPECTRUM OF SINGLE-WALL CARBON NANOTUBE
CARBOXYLIC ACID

Fig. 11



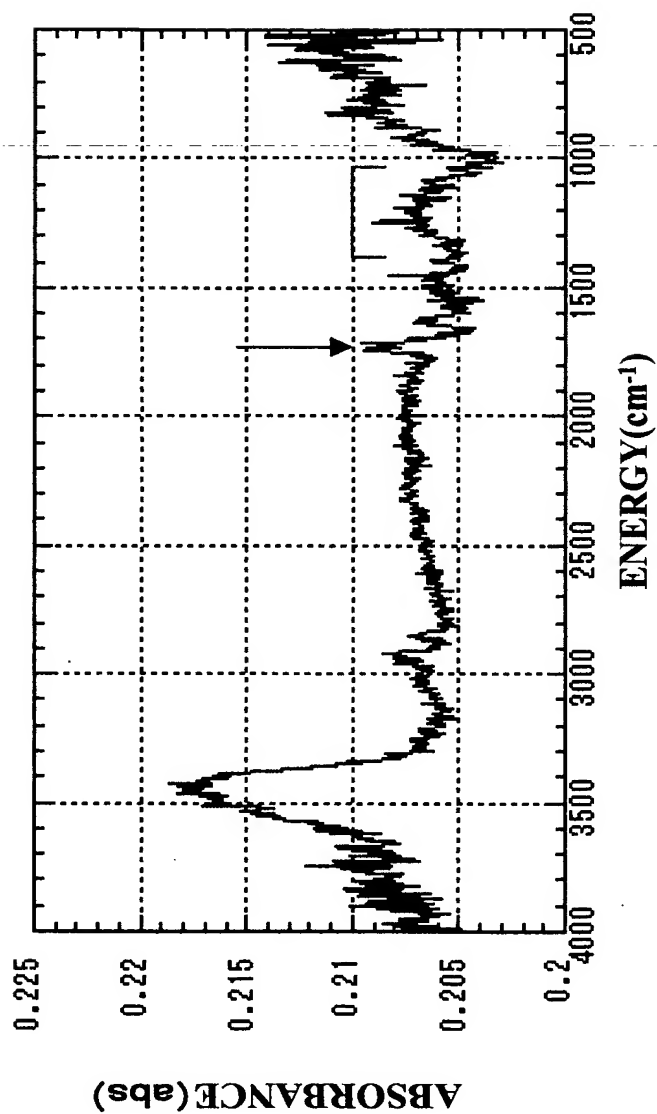
INFRARED ABSORPTION SPECTRUM OF SINGLE-WALL CARBON NANOTUBE
CARBOXYLIC ACID METHYL ESTER

Fig. 12



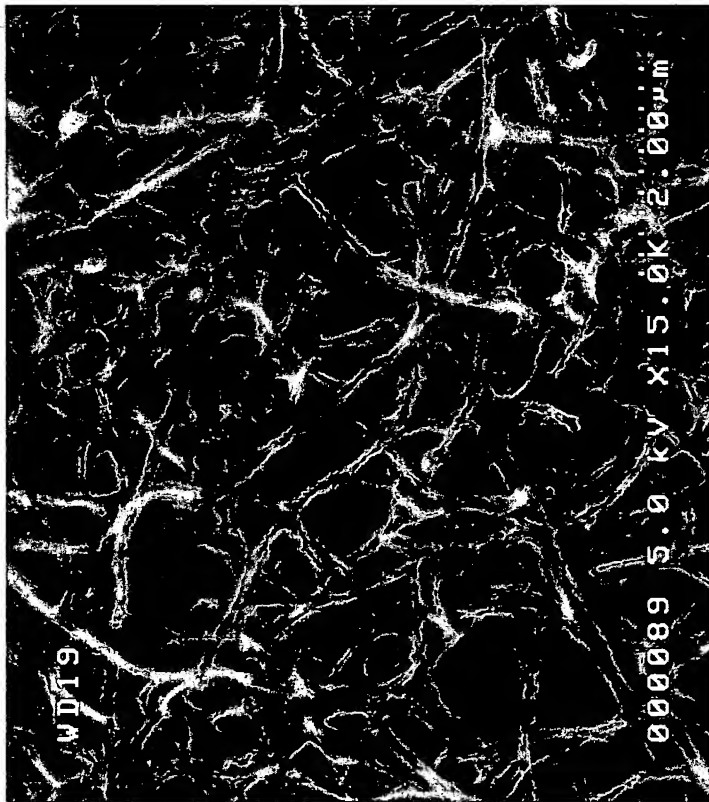
SCHEME FOR POLYMERIZATION REACTION BETWEEN MULTI-WALL CARBON
NANOTUBE CARBOXYLIC ACID METHYL ESTER AND ETHYLENE GLYCOL

Fig. 13



INFRARED ABSORPTION SPECTRUM OF ESTER OF MULTI-WALL CARBON NANOTUBE CARBOXYLIC ACID AND ETHYLENE GLYCOL

Fig. 14



SEM PHOTOGRAPH OF ESTER OF MULTI-WALL CARBON NANOTUBE CARBOXYLIC
ACID AND ETHYLENE GLYCOL: AT MAGNIFICATION OF 15,000

Fig. 15

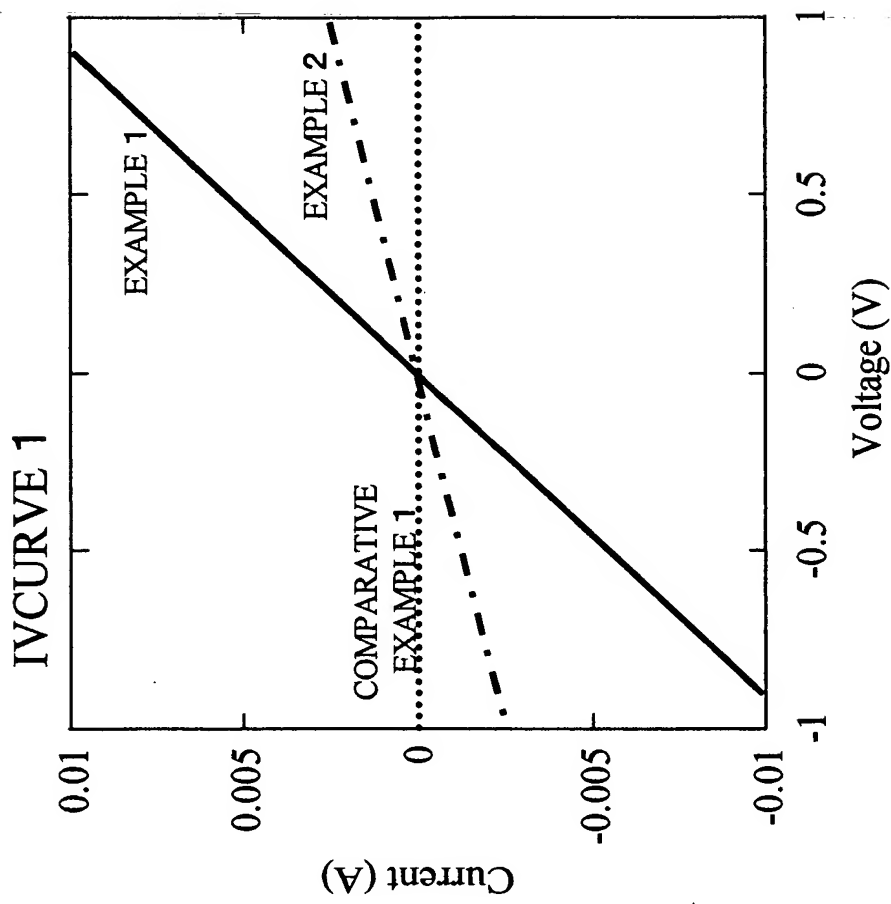


Fig. 16

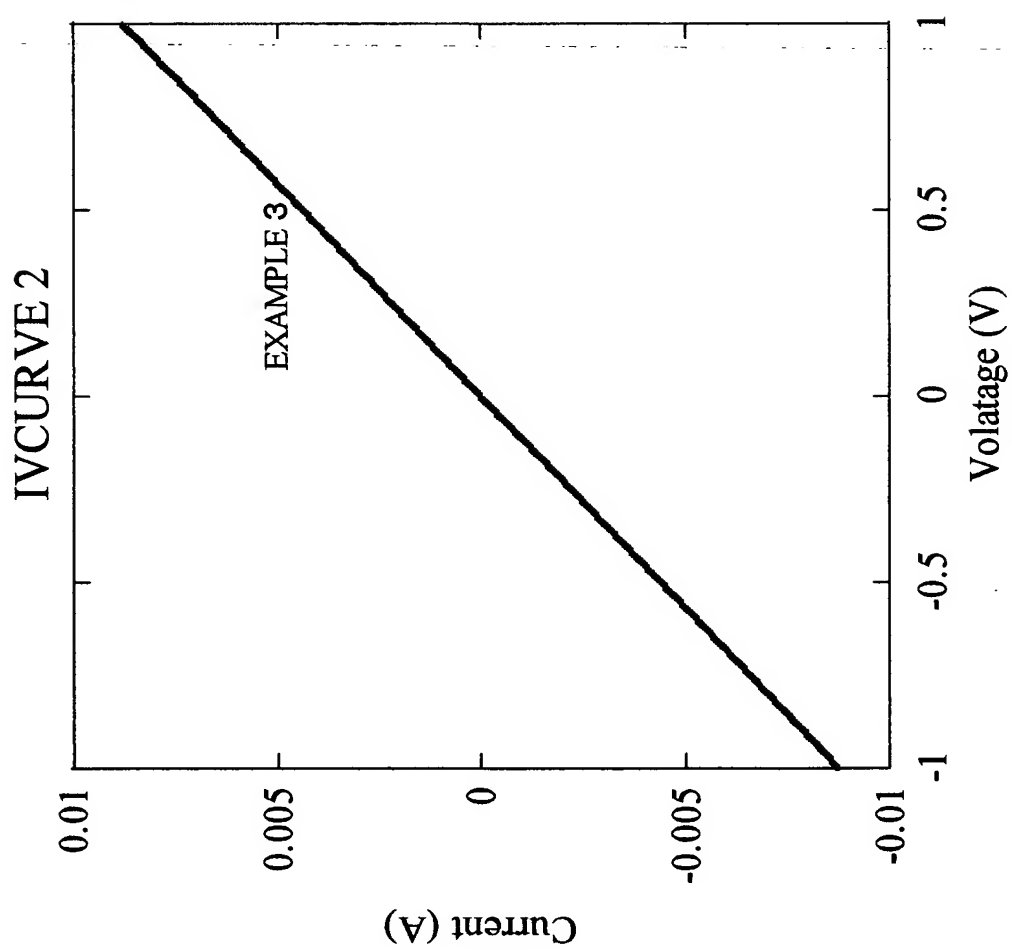


Fig. 17

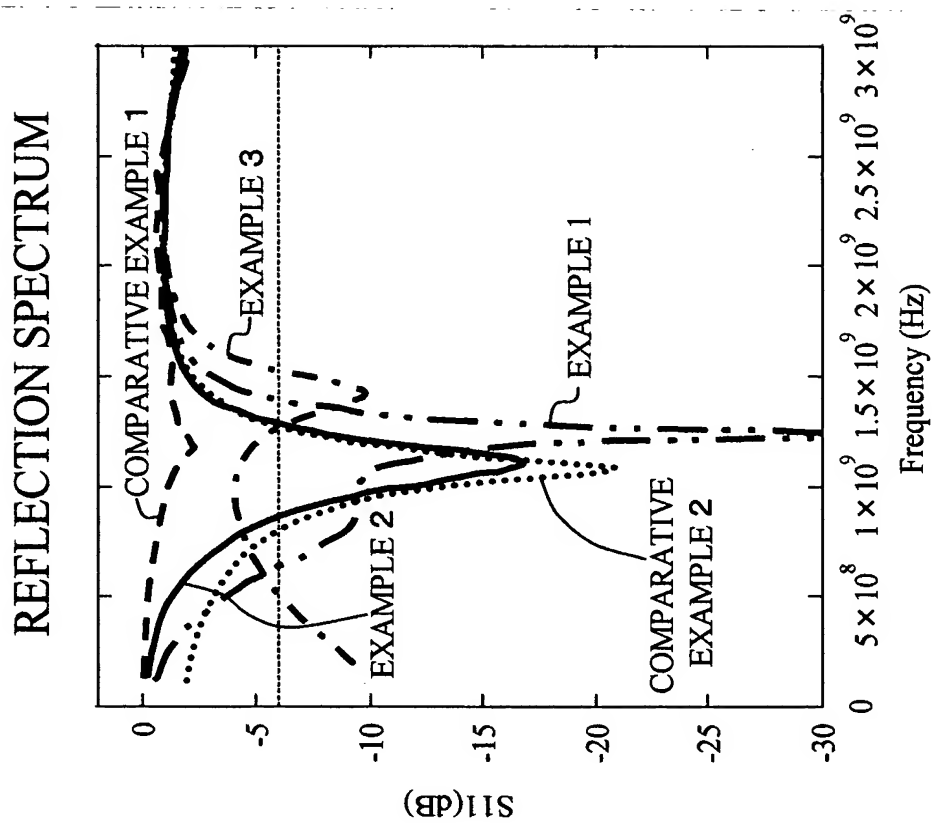


Fig. 18

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ ~~FADED~~ TEXT OR DRAWING
- ☒ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.